

ABSTRACT:

A signal processing device for a sensor output signal from a sensor covered by a color mask pattern having a plurality of colors, the signal processing device comprising a reconstruction unit (5) for generating a plurality of color signal values (R, G, B) for each pixel from the sensor output signal; and a clipping device (8) for clipping the sensor output signal or the plurality of color signal values (R, G, B). Preferably, the signal processing device further comprises: a conversion unit (6) for generating luminance signals (Y) and chrominance signals (U, V) from the plurality of color signal values (R, G, B), and an adjustment unit (10) for selectively setting the chrominance signals (U, V) to a zero color difference when clipping is performed (8). Advantageously, the clipping device (8) is arranged between the sensor (3) and the reconstruction unit (5), and the signal processing device further comprises a single bit white clip delay unit (11) for generating a switch signal for the adjustment unit (10), the switch signal comprising an at least 2x2 bit array from, or at least in response to, a signal (SS) from the clipping device (8) indicating that clipping has occurred.

(Fig. 2)